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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,113	10/24/2003	Sivapackia Ganapathiappan	10010060-4	1640

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/693,113	Applicant(s) GANAPATHIAPPAN, SIVAPACKIA	
	Examiner Tatyana Zalukaeva	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 11 and 12 are amended to transform them from the product claims to the product-by-process claims. Claims 13-23 are cancelled. New claims 24-26 are added. Claims 24 and 25 contain patentably distinct species of hydrophobic or hydrophilic form of polymer particles. At this time the election of species is not required, however, this requirement can be imposed later.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 24 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations of claims 24 and 26 stating that the ***convertible moiety of the particles*** is in hydrophilic or in a hydrophobic form in the INK composition is not supported in the instant specification in a way that those skilled in the art would have taken the claimed invention in combination with their knowledge and would be able to make and use it without undue experimentation. This is a new matter situation.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claims 11, 12 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by or in the alternative as obvious over Winnik et al (U.S. 4,795,794).

Winnik discloses a amphiphatic particles used in compositions with humectants and liquid vehicles obtained by dispersion polymerization process for affecting the preparation of particles which comprises dissolving in a suitable solvent a mixture of at **least two first monomer components** including at least one second monomer having covalently attached thereto **a dye moiety** (reads on polymerizable dye monomer), subsequently adding to the reaction mixture a polymerization initiator, thereafter affecting polymerization of the reaction mixture by heating, and separating the product particles therefrom (abstract). **Average particle size is 0.1-20 micron (0.1 micron=100nm)** (col.6, lines 40,41). The resulting mixture from polymerization, i.e. the product particles are separated from the reaction mixture by usual known techniques, including filtration (col.4, lines 34). Here the term dispersion polymerization vs. emulsion polymerization is to distinguish the **resulting** solid dispersion of particles, from the **initial** liquid droplets emulsion of monomers. Therefore, basically the process is the same, but by emulsion the term means the initial reaction mixture, and in dispersion, the term means the resulting polymer particles, which are obtained in either process. Styrene is exemplified by Winnik as a hydrophobic monomer in specific examples VI-IX. This is also a monomer referred to as a hydrophobic, in the instant specification. Convertible moiety in a hydrophobic form is represented by butyl methacrylate monomer, for example, cited in the examples of Winnik (VI).

Claims 11 and 12 are product-by-process claims, wherein the product-by-process is for the polymer binder that is the part of a claimed composition. The patentability of the product is defined by the product per se, not by the process, by which it is made. There is no evidence, or no reason to believe that the process of polymerization as instantly claimed produces a different product, that of Winnik, consult *In re Thorpe*, 227 USPQ 964 (CAFC 1985), wherein the Examiner rejected product-by-process claims over a product, which although prepared in a different manner, appeared to be the same (prima facie) as the claimed product.

Furthermore, because of the nature of product-by process claims, the Examiner cannot ordinarily focus on the precise difference between the claimed product and the disclosed product. It is then Applicants' burden to prove that an unobvious difference exists. See *In re Marosi*, 218 USPQ 289, 292-293 (CAFC 1983).

In the instant case no Graham vs. John Deere analysis was made but rather the test set out in MPEP 706.03(e) and *In re Marosi* was applied while explaining why the claimed product does not patentably distinguish over the prior art under 35 USC 102/103.

See also footnote 11 O.G. Notice 1162 59-61, wherein a 35 USC 102/103 rejection is authorized in the case of product-by-process claims because the exact identity of the claimed product or the prior art product cannot be determined by the Examiner.

Response to Arguments

Applicant's arguments filed 12/06/2004 have been fully considered but they are not persuasive. With regard to Winnik reference reference, Applicants' arguments reside in contention that the particles of Winnik are different from the claimed particles because the particularities of the process of Winnik are not the same as particularities of the claimed process. Such, for instance, Applicants argue that Winnik does not utilize a surfactant. This is not found persuasive, because the PAA (polyacrylic acid) utilized in Winnik's examples VI, VII is a known surfactant. The ***availability of acrylic acid as surfactant*** is supported by several references, (US 20020011439[0054]; US 20030203624[01112]; US20050026444[0025]) that are used solely with the purpose to rebut Applicant argument on the absence of a surfactant with a factual evidence. With regard to the difference between the dispersion and emulsion processes, the Examiner opinion was expressed in the previous office action. Furthermore, as stated above the patentability of the product is defined by the product per se, not by the manufacturing process, and in the instant case even if the process is slightly different, it is presumed that the product is still substantially the same. Applicants have presented a valid side-by-side comparison between their particles and those disclosed by Winnik wherein the only difference is specificities of the manufacturing process, as alleged by Applicants. ***In re Dunn***, 349 F. 2d 433, 146 USPQ 489 (CCPA 1965)

In response to Applicants' arguments that Winnik's reference produces composition of different size and shape, Applicants' attention is drawn to col.6, lines 40,41, wherein explicitly taught that ***Average particle size is 0.1-20 micron (0.1 micron=100nm)***

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

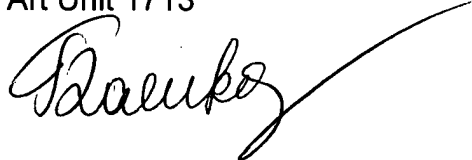
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713

A handwritten signature in black ink, appearing to read 'Zalukaeva', with a long, sweeping horizontal stroke extending to the right.

February 24, 2005